

**Robert Bosch Gesellschaft mit beschränkter Haftung**

**EMV-Prüflaboratorium, Abt. ME/EMC1**

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**DAkkS Akkreditierungskunde D-PL-12104-01-00**

**Liste der Prüfverfahren im flexiblen Akkreditierungsbereich - Stand 05.12.2024**

Fachbereich	Norm oder Prüfverfahren / Ausgabestand	Titel der Norm oder des Prüfverfahrens	Einschränkungen zum Prüfverfahren
<b>1 Grundnormen (flexible Akkreditierung)</b>			
EMV	IEC 61000-4-2:2008 (EN 61000-4-2)	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques - Electrostatic discharge immunity test	
EMV	IEC 61000-4-4:2012 (EN 61000-4-4)	Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test	
EMV	IEC 61000-4-5:2014 + A1:2017 (EN 61000-4-5)	Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test	
EMV	CISPR 16-2-1:2017 Edition 3.1	Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements	
<b>2 Produktfamiliennormen Kraftfahrzeuge (Automotive) (flexible Akkreditierung)</b>			
EMV	CISPR25:2021	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers	Nicht Kapitel 5
EMV	ISO 7637-2:2011	Road vehicles -- Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only	
EMV	ISO 7637-3:2016	Road vehicles -- Electrical disturbances from conduction and coupling – Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines	
EMV	ISO 10605:2008 + COR1:2010 + Amd1:2014	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge	
EMV	ISO 10605:2023	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge	
EMV	ISO 16750-2:2012	Road vehicles -- Environmental conditions and testing for electrical and electronic equipment -- Part 2: Electrical loads	Nicht Kapitel 4.11 + 4.12
EMV	ISO 16750-2:2023	Road vehicles -- Environmental conditions and testing for electrical and electronic equipment -- Part 2: Electrical loads	Nicht Kapitel 4.11 + 4.12 Kap. 4.4.2.3 nur bis 150 kHz Kap. 4.9.1.3 nur bis 10 µs
EMV	ISO 11452-2:2019	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 2: Absorber-lined shielded enclosure	Nur bis 6 GHz
EMV	ISO 11452-4:2020	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 4: Harness excitation methods	

EMV	ISO 11452-5:2002	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 5: Stripline	
EMV	ISO 11452-8:2015	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 8: Immunity to magnetic fields	
EMV	ISO 11452-9:2021	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 9: Portable transmitters	
EMV	Prüfverfahren nach Anhängen 7, 8, 9, 10 der UN ECE-R 10, Rev.6 + Amend.1 2020-10	- CISPR 25 "Limits and methods of measurement of radio disturbance characteristics for the protection of receivers used on board vehicles", second edition 2002 and corrigendum 2004. - ISO 7637-2 "Road vehicles - Electrical disturbance from conduction and coupling - Part 2: Electrical transient conduction along supply lines only on vehicles with nominal 12 V or 24 V supply voltage", second edition 2004. - ISO 11452 "Road vehicles - Electrical disturbances by narrowband radiated electromagnetic energy - Component test methods": Part 2: Absorber-lined chamber (ISO 11452-2, second edition 2004); Part 4: Bulk current injection (BCI) (ISO 11452-4, fourth edition 2011); Part 5: Stripline (ISO 11452-5, second edition 2002).  Regelung Nr. 10 der Wirtschaftskommission der Vereinten Nationen für Europa (UN/ECE) K76– Einheitliche Bedingungen für die Genehmigung der Fahrzeuge hinsichtlich der elektromagnetischen Verträglichkeit: 2019-10	Nicht Anhänge 4, 5, 6 (Gesamtfahrzeug) Nicht Anhänge 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 (REESS)

### 3 EMV / EMF (flexible Akkreditierung)

EMV	IEC 62764-1:2022	Measurement procedures of magnetic field levels generated by electronic and electrical equipment in the automotive environment with respect to human exposure - Part 1: Low-frequency Assessment of electronic and electrical equipment	nur zur Anwendung bei Komponenten-messungen
EMV	IEC 62311:2019 (EN 62311)	Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz to 300 GHz)	Nur Nahfeld- Magnetfeldmessungen bis 400 kHz

### 4 Hausverfahren Kraftfahrzeuge (Automotive) (flexible Akkreditierung)

EMV	General Motors GMW3097:2019-03	General Specification for Electrical/Electronic Components and Subsystems, Electromagnetic Compatibility	Nicht Kapitel 3.4.3
EMV	Ford FMC1278:2021-10	Electromagnetic Compatibility Specification For Low and High Voltage Electrical/Electronic Components and Subsystems	Nicht Kapitel 17.6.1.3, 17.6.2.2
EMV	Fiat Chrysler CS.00054:2018-01	GENERAL ELECTRICAL AND EMC PERFORMANCE REQUIREMENTS FOR E/E COMPONENTS	Nicht Kapitel 5.5.5, 5.5.6.
EMV	Jaguar Land Rover JLR-EMC-CS v1.0 Amd.4, 2015-02	Electromagnetic Compatibility Specification For Electrical/Electronic Components and Subsystems	

### 5 Militär-Standards (flexible Akkreditierung)

EMV	MIL-STD-461G:2015	DEPARTMENT OF DEFENSE INTERFACE STANDARD: Requirements for the control of electromagnetic interference characteristics of subsystem and equipment	Nur RE101, RS101
EMV	Defense Standard 59-411 Part 3 Issue 1 Amendment 1 31 <sup>st</sup> January 2008	Electromagnetic Compatibility - Test Methods and Limits for Equipment and Sub systems	Nur DRS01.B

## 6 Zurückgezogene Verfahren oder Verfahren zu denen neuere Ausgaben existieren (die aber noch referenziert werden)

### 6.1 Grundnormen

n.a. - keine zurückgezogenen Normen

### 6.2 Produktfamiliennormen Kraftfahrzeuge (Automotive)

EMV	IEC CISPR 25:2008 + Cor.1:2009	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers	Nicht Kapitel 5, 6.6 <i>(im Anhang nicht eingeschränkt)</i>
EMV	CISPR 25:2016	Vehicles, boats and internal combustion engines – Radio disturbance characteristics – Limits and methods of measurement for the protection of on-board receivers	Nicht Kapitel 5, 6.6
EMV	CISPR 25:2016 + COR1:2017	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers	Nicht Kapitel 5, 6.6 <i>(im Anhang nicht eingeschränkt)</i>
EMV	DIN EN 55025:2018	Fahrzeuge, Boote und von Verbrennungsmotoren angetriebene Geräte - Funkstörleigenschaften - Grenzwerte und Messverfahren für den Schutz von an Bord befindlichen Empfängern (CISPR 25:2016 + COR1:2017); Deutsche Fassung	Nicht Kapitel 5
EMV	CISPR 16-2-1:2014 + COR1:2020	Specification for radio disturbance and immunity measuring apparatus and methods – Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements	
EMV	ISO 7637-2:2004	Road vehicles -- Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only	
EMV	ISO 7637-2:2004 + Amd.1:2008	Road vehicles -- Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only	
EMV	ISO 7637-3:2007	Road vehicles -- Electrical disturbances from conduction and coupling – Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines	
EMV	ISO 10605:2001	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge	
EMV	ISO 10605:2008	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge	
EMV	ISO 10605:2008 + Cor.1:2010	Road vehicles -- Test methods for electrical disturbances from electrostatic discharge	
EMV	ISO 11452-2:2004	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 2: Absorber-lined shielded enclosure	Nur bis 6 GHz

EMV	ISO 11452-4:2005 + Cor.1:2009	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 4: Bulk Current Injection	
EMV	ISO 11452-4:2011	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 4: Harness excitation methods	
EMV	ISO 11452-8:2007	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 8: Immunity to magnetic fields	
EMV	ISO 11452-9:2012	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 9: Portable transmitters	
EMV	Prüfverfahren nach Anhängen 7, 8, 9, 10 der UN ECE-R 10, Rev.4 + Cor.1 2012-6 + Amend.1 2012-08 + Amend.2 2013-08 + Amend.3 2016-10	<ul style="list-style-type: none"> <li>- CISPR 25 "Limits and methods of measurement of radio disturbance characteristics for the protection of receivers used on board vehicles", second edition 2002 and corrigendum 2004.</li> <li>- ISO 7637-2 "Road vehicles - Electrical disturbance from conduction and coupling - Part 2: Electrical transient conduction along supply lines only on vehicles with nominal 12 V or 24 V supply voltage", second edition 2004 and Amd1: 2008.</li> <li>- ISO 11452 "Road vehicles - Electrical disturbances by narrowband radiated electromagnetic energy - Component test methods": Part 2:Absorber-lined chamber (ISO 11452-2, second edition 2004); Part 4: Bulk current injection (BCI) (ISO 11452-4, third edition 2005 and Corrigendum 1:2009); Part 5: Stripline (ISO 11452-5, second edition 2002).</li> </ul> <p>Regelung Nr. 10 der Wirtschaftskommission der Vereinten Nationen für Europa (UN/ECE) – Einheitliche Bedingungen für die Genehmigung der Fahrzeuge hinsichtlich der elektromagnetischen Verträglichkeit: 2012-03</p>	<p>Nicht Anhänge 4, 5, 6 (Gesamtfahrzeug)</p> <p>Nicht Anhänge 11, 12, 13, 14, 15, 16, (REESS)</p>
EMV	Prüfverfahren nach Anhängen 7, 8, 9, 10 der UN ECE-R 10, Rev.5 + Amend.1 2016-10 + Amend.2 2019-11	<ul style="list-style-type: none"> <li>- CISPR 25 "Limits and methods of measurement of radio disturbance characteristics for the protection of receivers used on board vehicles", second edition 2002 and corrigendum 2004.</li> <li>- ISO 7637-2 "Road vehicles - Electrical disturbance from conduction and coupling - Part 2: Electrical transient conduction along supply lines only on vehicles with nominal 12 V or 24 V supply voltage", second edition 2004 and Amd1: 2008.F70</li> <li>- ISO 11452 "Road vehicles - Electrical disturbances by narrowband radiated electromagnetic energy - Component test methods": Part 2:Absorber-lined chamber (ISO 11452-2, second edition 2004); Part 4: Bulk current injection (BCI) (ISO 11452-4, third edition 2005 and Corrigendum 1:2009); Part 5: Stripline (ISO 11452-5, second edition 2002).</li> </ul> <p>Regelung Nr. 10 der Wirtschaftskommission der Vereinten Nationen für Europa (UN/ECE) – Einheitliche Bedingungen für die Genehmigung der Fahrzeuge hinsichtlich der elektromagnetischen Verträglichkeit: 2014-10</p>	<p>Nicht Anhänge 4, 5, 6 (Gesamtfahrzeug)</p> <p>Nicht Anhänge 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22 (REESS)</p> <p>Nicht Appendix 8 (HV)</p>

### 6.3 EMF

n.a. - keine zurückgezogenen Normen

<b>6.4 Hausverfahren Kraftfahrzeuge (Automotive)</b>			
EMV	FMC1278:2018-11	Electromagnetic Compatibility Specification For Low and High Voltage Electrical/Electronic Components and Subsystems	Nicht Kapitel 12.6.1.3
<b>6.5 Militär-Standards</b>			
EMV	MIL-STD-461E:1999	DEPARTMENT OF DEFENSE INTERFACE STANDARD: Requirements for the control of electromagnetic interference characteristics of subsystem and equipment	Nur RE101, RS101
EMV	MIL-STD-461F:2007	DEPARTMENT OF DEFENSE INTERFACE STANDARD: Requirements for the control of electromagnetic interference characteristics of subsystem and equipment	Nur RE101, RS101